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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,317	06/27/2003	Joseph Daniel Coenen	K-C 13485.1	7356

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EXAMINER	
PURVIS, SUE A	
ART UNIT	**PAPER NUMBER**
1734	

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/609,317	COENEN ET AL.	
	Examiner	Art Unit	
	Sue A. Purvis	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-23 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 06/27/2003.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 10 recites the limitation "the actual position" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claim 8 introduces the step of determining the "actual position" of the superimposed component, but this claim depends from 7 where there is no discussion of the components "actual position."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 7, 22, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Instance (US Patent No. 5,674,334).

Instance discloses a process and apparatus for manufacturing labels where a continuously moving first layer (112) includes a plurality of pre-printed images which are equivalent to reference marks. A sensor (188) senses the reference marks and generates a

signal thereby measuring the distance between the images. A plurality of continuously moving discrete components (122) are conveyed toward the first layer (112). Sensor (184) sends a signal to the pulse counter when a component (122) is detected in the feed system (126) thus sensing a distance between two successive components of the second layer. The sensor (188) operates in conjunction with a control system (not shown) to coordinate the application of the component (122) to the first layer (112) so that the component (122) coincide at the correct point on the web in registry with the printed image. Adhesive is applied to the upper surface of the web (112) by an adhesive applicator (186). The component sensor (184) or the web sensor (188) can be employed to trigger the application of adhesive to the web (112). (Figure 3; Col. 9, lines 1-31.)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-6, 8, 10-12, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Instance in view of Weyenberg (US Patent No. 5,359,525).

Instance discloses a process and apparatus for manufacturing labels where a plurality of continuously moving discrete components (122) are registered to a continuously moving first layer (112). The continuously moving first layer (112) includes a plurality of pre-printed images which are equivalent to reference marks. Sensor (188) is adapted to detect the succession of preprinted marks along the length of the self-adhesive web (112). The sensor (188) operates in conjunction with a control system (not shown) to coordinate the application of the folded label (122) to the web (112) so that the folded label (122)

coincide at the correct point on the web in registry with the printed image. The second layer or folded label (122) is a plurality of continuously moving discrete components. The folded label sensor (184) sends a signal to the pulse counter when a folded label (122) is detected in the label feed system (126) thus sensing a distance between two successive components of the second layer. (Figure 3; Col. 9, lines 1-31.)

Instance does not disclose sensing the position of the discrete component (122) layer relative to the corresponding marks on the first layer (112).

Weyenberg discloses an apparatus and method for registration control of assembled components. It includes a registration inspection apparatus (41) which communicates comparator (61) wherein the actual position of the components is compared with the desired position. The inspection apparatus of the invention provides the requisite quality control. (Col. 6, lines 24-36.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a sensing means located after the discrete component is added to the first layer in Instance for quality control purposes, as disclosed in Weyenberg. In particular, by inspecting the actual position of the component on the web, there is an additional step for quality control besides using the sensor (188) to align the label to the web.

Regarding claims 2 and 16, the process of Instance in view of Weyenberg includes a step of correcting the placement of the labels onto the web, thus meets the limitation of these claims.

Regarding claim 3, the labels are aligned to the registration on the web.

Regarding claim 4, the web includes at least on registration mark per product.

Regarding claim 5, the embodiment of Figure 3 does not disclose a third layer, however it would have been obvious to one having ordinary skill in the art at the time the

invention was made to include a third layer as shown in the embodiment of Figure 1 of Instance. Instance teaches that another embodiment includes overlaminating the label and backing material with a self-adhesive laminar material (28). (Col. 7, lines 51-59.)

Regarding claim 6, while Instance does not specifically show that the web layer is replaced, considering the layer supply is most likely finite, it is within the purview of the artisan to replace the supply as need.

Regarding claim 8, Weyenberg discloses the step of determining the actual position of the superimposed components relative to the marks and its combination with Instance is discussed above.

Regarding claims 10-12 and 18-20, Weyenberg determines the positional relationships and compares them to the desired positional relationships and signals representing the deviation of the actual positional relationship from the desired positional relationship. The deviation is used in a feedback control to adjust the operation of the respective component supply means in order to maintain the position of that component in each article within its acceptable range. (Col. 3, lines 30-40.)

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Instance as applied to claim 7 above, and further in view of Popp et al. (US Patent No. 5,932,039).

Instance does not disclose filtering out signal anomalies.

Popp discloses in conjunction with performing a running average of the measured counts, a filtering function is performed to filter out signal anomalies. Examples of signal anomalies include a dirty photoeye, missing or extra reference marks (74), movement or weaving of the layers, measuring the counts outside a preprogrammed range for averaging purposes, known inaccurate data due to registration control events, or the like. (Col. 16, lines 35-44.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a filtering step in Instance, because Popp teaches is it useful filter out signals which may be caused by a dirty photoeye or sensor.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Instance as applied to claim 7 above.

While Instance does not specifically show that the web layer is replaced, considering the layer supply is most likely finite, it is within the purview of the artisan to replace the supply as need. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the registration material on the web be different with different spacing as could be desired by the artisan.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Instance in view of Weyenberg as applied to claim 15 above, and further in view of Popp et al.

Instance in view of Weyenberg does not disclose filtering out signal anomalies.

Popp discloses in conjunction with performing a running average of the measured counts, a filtering function is performed to filter out signal anomalies. Examples of signal anomalies include a dirty photoeye, missing or extra reference marks (74), movement or weaving of the layers, measuring the counts outside a preprogrammed range for averaging purposes, known inaccurate data due to registration control events, or the like. (Col. 16, lines 35-44.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a filtering step in Instance, because Popp teaches is it useful filter out signals which may be caused by a dirty photoeye or sensor.

11. Claims 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandon et al. (US Patent No. 5,818,719) in view of Instance.

Brandon discloses a process and apparatus for controlling the registration of two layers of material. The process includes providing a first layer (54) and a layer of discrete components (32). The feed of the discrete components is monitored by a proximity switch (62). The components are placed upon the first layer in a spaced apart manner. (Col. 9, lines 6-26). Figure 8 shows the waveform (156) of the proximity switch reading. (Col. 15, lines 53-61).

Brandon et al. does not the use of reference marks on the first layer and synchronizing the feed rate of the discrete components based on the reference marks. Instead Brandon et al. uses a proximity switch for monitoring and controlling the placement of the components in relation to a second layer (66) which does have reference marks thereon. Adhesive is selectively applied to the second layer (66) by applicator (98). (Col. 11, lines 29-43).

Instance teaches that by using markers on a continuously moving web and components being properly placed thereon.

It would have been obvious to one having ordinary skill in the art at the time the invention was made that an additional means of control would be to add reference marks to the first layer as shown in Instance. This results in an additional means by which to control the placement of the components and insure proper placement and preventing mistakes in assembly. Instance teaches that such control is within the purview of one having ordinary skill in the art.

Regarding claim 13, in Brandon an additional layer (66), which is composed of two components (66, 92), is superimposed on the first layer and discrete components. An adhesive applicator (94) applies a desired pattern of a suitable adhesive to the continuously moving layer (92). (Figure 5.)

12. Claims 15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandon et al. in view of Instance and Weyenberg.

Brandon in view of Instance discussed in paragraph 11 above does not disclose the corrective step where the placement of components is corrected subsequent to superimposing the components on the first layer.

Weyenberg discloses an apparatus and method for registration control of assembled components. It includes a registration inspection apparatus (41) which communicates comparator (61) wherein the actual position of the components is compared with the desired position. The inspection apparatus of the invention provides the requisite quality control. (Col. 6, lines 24-36.)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a sensing means located after the discrete component is added to the first layer in Brandon in view of Instance for quality control purposes, as disclosed in Weyenberg. In particular, by inspecting the actual position of the component on the web, there is an additional step for quality control besides using the sensor (188) to align the label to the web.

Regarding claim 21, in Brandon an additional layer (66), which is composed of two components (66, 92), is superimposed on the first layer and discrete components. (Figure 5.)

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue A. Purvis whose telephone number is (571) 272-1236. The examiner can normally be reached on Monday through Friday 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rick Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Sue A. Purvis
Examiner
Art Unit 1734

SP
January 9, 2004